

REMARKS/ARGUMENTS

In the Office Action mailed January 10, 2008, claims 1-7, 9, and 10 were rejected. In response, Applicants hereby request reconsideration of the application in view of the proposed amendments and the below-provided remarks. Applicants submit that the proposed amendments place the present application in condition for allowance or in better condition for appeal. No claims are added or canceled.

For reference, claims 3-7, 9, and 10 are currently amended. In particular, each of claims 3-5 is amended to clarify the references to the “first” and “second” processors, since independent claim 1 recites first and second processors. Similarly, claim 6 is amended to clarify the references to the “first and second” shareable units, since independent claim 1 recites first and second shareable units. Also, claim 7 is amended to clarify the references to the “first and second” processors. Claim 9 is amended to clarify that each processor interface has a programming link either for connecting to a corresponding processor bus or for connecting to a corresponding processor. Claim 10 is amended to recite the first and second bi-directional communication channels are configured to transfer data and/or control information to and from the first and second shareable units. Applicants respectfully submit that these amendments clarify the previous language of the claims and are fully supported by the subject matter of the originally filed application.

Claim Rejections under 35 U.S.C. 102

Claims 1-12 were rejected under 35 U.S.C. 102(b) as being anticipated by Koch et al. (U.S. Pat. Pub. No. 2002/0055979, hereinafter Koch). However, Applicants respectfully submit that these claims are patentable over Koch for the reasons provided below.

Independent Claim 1

Claim 1 recites “wherein the first programmable unit and the second programmable unit each comprises a processor interface, a direct access unit core, and two external direct memory access channel interfaces” (emphasis added). In other words, claim 1 recites a first programmable interface unit with two external direct memory

access (DMA) channel interfaces, and a second programmable unit with two external DMA channel interfaces. Thus, each of the first and second programmable units has two external DMA channel interfaces for a total of four (4) external DMA channel interfaces within the claimed system.

In contrast, Koch does not disclose two separate programmable units each having two external DMA channel interfaces. Although the Office Action relies on the illustration of Fig. 4 for support to show a system 45 with two access units 48 and 51 connected to corresponding DMA units 54 and 41, the Office Action fails to recognize that Fig. 6 specifically shows each of the access units 48 and 51 as having only a single external DMA channel interface 60 and 70. In other words, the first access unit 51 merely includes a single external DMA channel interface 70, and the second access unit 48 merely includes a single external DMA channel interface 60. Hence, each access unit merely includes a single external DMA channel interface and does not include two external DMA channel interfaces. Thus, even though each access unit may be connected to a corresponding DMA unit and processor bus, the access units do not each have two external DMA channel interfaces. Additionally, for this reason, it appears that each access unit could only be coupled directly to a single DMA unit, and not to multiple DMA units, because each access unit only includes a single external DMA channel interface.

Therefore, Koch does not disclose all of the limitations of the claim because Koch does not disclose two separate programmable units each having two external DMA channel interfaces, as recited in the claim. Accordingly, Applicants respectfully assert claim 1 is patentable over Koch because Koch does not disclose all of the limitations of the claim.

Dependent Claims

Claims 2-7, 9, and 10 depend from and incorporate all of the limitations of independent claim 1. Applicants respectfully assert claims 2-7, 9, and 10 are allowable based on allowable base claims. Additionally, each of claims 2-7, 9, and 10 may be allowable for further reasons.

CONCLUSION

Applicants respectfully request reconsideration of the claims in view of the proposed amendments and remarks made herein. A notice of allowance is earnestly solicited.

At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account **50-3444** pursuant to 37 C.F.R. 1.25. Additionally, please charge any fees to Deposit Account **50-3444** under 37 C.F.R. 1.16, 1.17, 1.19, 1.20 and 1.21.

Respectfully submitted,

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